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TITLE : CHEMICAL SOLUTION FOR ARTIFICIAL VERDIGRIS AND TREATMENT OF  
ARTIFICIAL VERDIGRIS

ABSTRACT : PURPOSE: To obtain a chemical solution for artificial verdigris for forming a verdigris coating film having adhesivity and free from discoloring by preparing the chemical solution consisting of a specified ratio of  $\text{ZnCl}_2$ ,  $\text{H}_3\text{PO}_4$ ,  $\text{H}_2\text{O}_2$  and water and having a specific pH value.

CONSTITUTION: The chemical solution consisting of 10-200g/l  $\text{ZnCl}_2$  50-500g/l  $\text{H}_3\text{PO}_4$ , 20-100g/l  $\text{H}_2\text{O}_2$  and balance water and having pH of -1 to 2 is prepared. If necessary, at least one of  $\leq 50\text{g/l}$  NaOH, 50g/l Zn,  $\leq 10\text{g/l}$  one or more kind of  $\text{SnCl}_2$ ,  $\text{CoCl}_2$ ,  $\text{NiCl}_2$  and ethylenediaminetetraacetic acid is added. The artificial verdigris coating film excellent in workability and weather resistance is obtained by sticking the chemical solution to a copper alloy by  $\geq 20\text{g/m}^2$  dry coating weight and aging it in the atmosphere of 20-80°C and  $\geq 60\%$  humidity.

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